

# Minnesota Management Review



School of Management  
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## SYMBOL of the SCHOOL OF MANAGEMENT



The School of Management introduced a new symbol which reflects, in part, the newly defined mission of the institution.

The single line without a beginning or an end—a continuum—is the classic symbol of education. The earliest use of a continuum symbolized education as a continu-

ing process. In a modern reference, education as a continuum refers to complex issues which do not have a single dimensional answer.

The weaving of the continuum symbolizes several aspects of the School of Management.

- It identifies the School's effort to acknowledge the interaction of the business or private sector with the not-for-profit and public sector. Understanding of all sectors is critical to the modern manager and preparing managers for all areas will be an increased concern of the School of Management.
- It symbolizes the commitment of the School to developing strong interactive relationships with these sectors.
- The weave emphasizes that the task of management is the organizing and integration of human and material resources to deliver services.
- Finally, the closely knit pattern reflects the objective of the School of Management to work with all disciplines both inside and outside the School to prepare its students for dealing with the complex interrelation between the public a manager must serve and the environments in which an organization must function. The modern manager must be sensitive to the natural, customer and local environment as well as understand the principles of finance, marketing, accounting and other management disciplines. The School of Management combines all elements in its revised curricula.

## Foster Named to Revenue Forecast Task Force

Edward M. Foster, associate dean of the School of Management, was named chairman of a task force appointed by Governor Al Quie to improve the accuracy of the Minnesota Finance Department's state revenue forecasts.

The group includes two University of Minnesota professors and seven Twin Cities area business leaders. Other members of the task force are Frank Coyne, vice president for financial affairs of Burlington Northern Inc.; Merlin E. Dewing, managing partner of Peat, Marwick, Mitchell & Co.; Donald E. Garretson, financial vice president, 3M; E. Robert Kinney, General Mills board chairman; Louis E. Navin, vice president and chief financial officer of Honeywell Inc.; Raymond Plank, chairman of Apache Corp.; Richard L. Schall, vice chairman and chief administrative officer of Dayton Hudson Corp.; C. Angus Wurtele, chairman of Valspar Corp.; and Francis M. Boddy, a retired University professor of economics.

The task force is expected to evaluate operations of the Finance Department and its methods in making revenue forecasts. It will also serve as a search committee for a new finance commissioner.

## Minnesota Business Conditions Survey

### Business conditions stay relatively level between May and August, 1981.

Almost equal proportions of retailers report increases, decreases, or no change in sales levels between May and August. Manufacturers' reports are similarly evenly split between those reporting increases, decreases, or no change in production during the past three months.

Compared to a year ago, however, fifty percent of the retailers reported higher sales, reflecting better business conditions than those of August 1980.

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## 3M Foundation Funds Human Resources Management Chair



Lewis W. Lehr

The 3M Foundation announced in September that it will provide \$800,000 to support a chair in Human Resources Management in the School of Management at the University of Minnesota. This is the largest grant 3M has ever made to a single institution.

"We are pleased to be able to support the School of Management and the University by providing this new chair," commented Lewis W. Lehr, chairman and chief executive officer of 3M. "We believe that the development of effective means for managing, training and retaining human resources throughout an organization is one of the greatest management challenges facing American business today. This chair and its related programs will greatly enhance understanding of this critical area of activity."

Funded at \$80,000 per year over ten years, the chair will deal with such areas as human resource development, work productivity, organizational behavior, and the ability to use human resources to accomplish organizational objectives.

"3M has always been a world leader in the field of human resource management and development, and the 3M chair symbolizes that leadership," commented David M. Lilly, dean of the School of Management. "Without question, effective management of human resources to deliver goods and services is one of the major ingredients in increasing productivity. Japan's success in recent years in competing with the United States attests to this fact."

"This chair will be the focal point for a substantially strengthened program in the School of Management in this vital area—one which we expect will be recognized among the leading human resource management programs in the nation. The ultimate beneficiaries, of course, will be our organizations whose management will be strengthened by the increased knowledge this chair and its related programs will create and the consumers who will benefit from the resulting increase in productivity."

The 3M Human Resources Management Chair is the fifth new chair in the School of Management supported by private funds since January, 1979. The other four chairs include the Minnesota Banking Chair, the Minnesota Insurance Industries Chair, the Paul S. Gerot/Pillsbury Chair in Marketing, and the Honeywell Chair in Management Information Systems. Private support to the School of Management during that period exceeds \$9.7 million.

## Who Loses from Inflation?

The resentment and lack of confidence caused by inflation—far more than actual loss of economic power—are the greatest dangers of inflation, according to Edward Foster, associate dean of the School of Management.

Speaking to the annual meeting of American Academy of Political and Social Sciences, Dean Foster, in an address titled *Who Loses From Inflation*, concluded, "Those who lose from inflation are all of us who share the frustration and uncertainty that it generates, and fear for the continued stability of a society functioning under its influences."

Because personal incomes and benefits have generally kept pace with inflation, the loss of economic power attributed to inflation may not be nearly as great as is sometimes assumed, according to Dean Foster. Yet its psychological impact has taken a toll on the public.

Foster offers this hypothesis as the real loss from inflation, "Persistent inflation, apparently beyond the reach of government attempts to control it, destroys confidence in the existence of a government in control of our destiny and capable of dealing with the problems that confront us. It creates fear that the social contract under which we have operated in the past is no longer operative."

Coupled with this is resentment. To the extent that distribution of the burden of real income reduction caused by energy or food shortages is resolved by inflation, there is intense concern that the distribution be fair.

"Many groups have been deeply resentful that inflation has operated unfairly and that they have been made to bear more than their proper share," explains Foster.

While less than suspected, inflation does affect the economic power of some groups. Summarizing a large body of research:

- There is a single inescapable cost, the fall in the buying power of cash balances; this cost is borne by households and firms who hold those balances.
- Pensioners and others on fixed incomes suffer unduly from unanticipated inflation; they may be able to reduce their vulnerability when inflation is anticipated, but the lack of securities that provide a good inflation hedge means that they will probably continue to face considerable risk due to uncertainty of future rates of inflation.
- Stockholders have suffered unduly because of a combination of tax law and accounting practices. While this group may not have the political strength to protect their income based on their claim for justice alone, their low after-tax profits have discouraged investment. Because investment for productivity and economic growth is a goal that attracts considerable support, it is possible that tax laws will be changed to decrease or eliminate the effect of inflation on profits in the future.

"No other major groups have been identified as suffering disproportionately due to inflation," explained Foster. "That is why I am led to focus on uncertainty and fear as the most costly consequences, and the main reason that we need to bring inflation under control."

## Million Dollar Endowment Aids Faculty Research

A one million dollar endowment fund for faculty research and development has been awarded to the School of Management by the McKnight Foundation.

"We are extremely pleased," said David Lilly, dean of the School of Management, "that the McKnight Foundation is recognizing and supporting this important stage in our development. We have revised our undergraduate and graduate programs, increased our faculty by recruiting some of the highest quality professionals in the area of management, and we can now focus on the development of our faculty to ensure the highest standards of excellence."

Faculty development through research will be especially encouraged in three areas: 1) issues of central importance to the management of the state's resources, 2) interdisciplinary research that addresses the 'real world' issues which often involve several disciplines, and 3) international research involving knowledge of the world economy and how it will affect the opportunities and decisions facing U.S. and, especially, Minnesota organizations.

## School Introduces New Publication

We are pleased to introduce the *Minnesota Management Review*, a publication designed to illustrate the expanded role of the School of Management. Through this publication we will make every effort to provide the readers with excerpts from addresses, lectures, papers and commentaries prepared by the faculty, staff, alumni and visitors to the School of Management. In addition, we will attempt to bring you up to date on data on economic, industrial, commercial, and social trends which affect the Minnesota, Upper-Midwest and, in some cases, the nation's economy.

For the alumni, we will have information on upcoming Alumni Association activities, news of the Association and, of course, class notes. For those of you who have not attended the School, we hope you will find the information helpful to your endeavors.

To make this truly valuable, we would appreciate your views and comments on the publication and its contents. Please address all letters to:

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School of Management  
University of Minnesota  
271 19th Avenue South  
Minneapolis, Minnesota 55455  
(612) 376-9246

## New School Brochure Published

A new School of Management brochure providing an overview of the School has just been published. Alumni and friends may secure single copies by contacting Kay Hubbard.

## Corporate and Community Relations Director Appointed

Kay M. Hubbard has been named director of Corporate and Community Relations for the School of Management.

Ms. Hubbard will develop and expand relationships with the public and private organizations to encourage greater understanding of and involvement in school educational, research, and training programs. A major part of the job involves working directly with companies and organizations to provide information and identify School resources and services of particular interest.

Hubbard has served as a consultant to the St. Paul Area Chamber of Commerce where she coordinated the Teacher Internship Program, a program designed to foster understanding between the business and education sectors. Prior to that, she served as a consultant to 3M developing and coordinating a business/education communications program and was formerly a secondary teacher in White Bear Lake. She replaces David Reynolds-Gooch who coordinated the corporate relations program during 1980-81.

"In many ways, my work will involve information and referral, and keeping the lines of communication open between the School and various segments of the community," Hubbard said. "I am impressed with the direction that the School of Management has taken and look forward to working with corporate and community organizations and with such a fine faculty and staff."

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## Minnesota Business Conditions Survey

*From—page 1*

### **Employment levels are reported stable by both manufacturers and retailers.**

Sixty-seven percent of retailers and fifty percent of manufacturers reported the same levels of employment as those in June.

### **Inflation continues to hit retailers harder than manufacturers.**

While seventy-eight percent of the retailers experienced higher prices for the goods they buy, only forty-seven percent of manufacturers reported higher material costs. This is the lowest figure in more than two years for manufacturers.

### **Prospects for the future are unclear.**

Although thirty-six percent of manufacturers show increased new orders between May and August, thirty-two percent report no change, and another thirty-two percent report lower new orders. With production relatively level and inventories up, these new order figures indicate that more manufacturers are likely to report level or declining production and employment in the next few months.

This report was prepared by Mr. Mansour Javidan, Graduate Assistant, under the supervision of Professor Roger B. Upson. This quarterly survey is based on the responses of a panel of 93 Minnesota retailers and manufacturers.



# The Minnesota Economy: A Report

Minnesota industries and its workers must become more productive than they were in the 1960s and 1970s, if the state is to be competitive in the 1980s.

This is the conclusion of a report by the Bureau of Business Research at the School of Management. *The Minnesota Economy: Where do things stand? What lies ahead?* is the first of several reports on the Minnesota business climate to be prepared by the Bureau of Business Research. This study, directed by Professor of Geography, John Adams, is funded by the Minnesota Business Partnership, the Minnesota AFL-CIO, and the University of Minnesota.

During the late 1960s and early 1970s, Minnesota's real product growth rates were higher than those of the nation in only 18 of the 43 industries, while Minnesota led the Upper Midwest region in 24 of the 43. When growth of real product per employee (per farm in agriculture) is considered, Minnesota firms led the U.S. average in only 20 industries, and led regional averages in only 21 of the 43.

Preliminary product and employment data for the mid-1970s available for 34 industries in the manufacturing, retailing, wholesaling, and service sectors show that Minnesota's real product grew more rapidly than the

nation's in 20 of the 34 industries, more slowly in 13, and at the same pace as the nation's in one. In real product per employee during this period, the state did better than the U.S. in 12 industries and worse in 22.

According to the researchers, two factors emerged:

- Minnesota's improvement with respect to the U.S. in the real product growth figures for the mid-1970s came about primarily because the state retail industries dropped less precipitously than the nation generally;
- The erosion of Minnesota's position in real product per employee is attributable to a declining productivity in manufacturing.

The second report in the series, *The Minnesota Economy: Some Comparisons with Other States and Details on Industrial Performance*, due in mid-October, will be available in limited quantity from the Minnesota Business Partnership, 2406 IDS Center, 80 S. 8th Street, Minneapolis, MN 55402.

For more information on this continuing project, contact the Minnesota Business Partnership, John Cairns, Executive Director (612) 370-0840; Edward Foster, Associate Dean, School of Management, University of Minnesota (612) 373-3759; or John S. Adams, Professor of Geography, University of Minnesota (612) 376-7106.

Minnesota Industry's Performance in the Late 1960s and Early 1970s

Industry Group	Number of Industries and Industry Groups Reported	Minnesota Real Product Growth Rate:				Minnesota Real Product Per Employee (or Farm) Growth Rate:			
		Better than US	Poorer than US	Better than UM	Poorer than UM	Better than US	Poorer than US	Better than UM	Poorer than UM
Agriculture	9	4	5	5	4	6	3	8	1
Agricultural services	1	0	0	1	0	0	1	0	1
Construction	3	1	2	2	1	1	2	2	1
Manufacturing	16	8	8	7	7	9	7	7	7
Transport, etc.	NA								
Wholesale	NA								
Retail	8	1	7	5	2	2	5	2	6
Finance, etc.	NA								
Services	6	4	1	4	2	2	4	2	4
Government	NA								
TOTALS	43	18	23	24	16	20	22	21	20

N.A.: Data compatible with this table were not available.

Minnesota Industry's Performance from 1972 to 1977

Industry Group	Number of Industries Reported	Minnesota Real Product Growth Rate		Minnesota Real Product Per Employee Growth Rate	
		Better than US	Poorer than US	Better than US	Poorer than US
Manufacturing	16	8	7	5	11
Retailing	8	6	2	4	4
Wholesaling	2	2	0	2	0
Services	8	4	4	1	7
TOTALS	34	20	13	12	22

Sources: Tables already presented in text.

## Executive Counsels MBA Graduates



Charles M. Denny, Jr.

"How a manager relates to others is the greatest predictor of success in a career and a corporation," Charles M. Denny Jr., president of Magnetic Controls, told the 246 MBA candidates at commencement exercises on June 14.

The difference between those companies who are surviving the onslaught from Japanese competition and those who are not is simply a matter of how the institutions relate to their people, and the reverse perspective of how the people relate to their institutions. The companies that will succeed all place a high value on each and every individual within their corporation, Denny told the graduates.

"They prize the innate creativity of every human being: they understand that people create—not machines, and they understand further that the rewards of enterprise must be shared with those who have created the institution's success," Denny said.

Magnetic Control's president warned of organizations which have created a bifurcated society—a division of the working place between those who think and those who do. "This division," Denny said, "creates several problems.

"The first is it deprives the working process of the vitality of those who often know the most about the problems in the process.

"The second is it transfers responsibility for results—be it unit of output, or quality, or product performance—from those who actually create the goods and services to those who only supervise the process.

"The third, and the most invidious result of this separation, is the unspoken statement that one individual is—by virtue of his or her position—superior to another."

"There are few individuals who are comfortable in a recognized subservient role. Ours is not an autocratic society. Few of us can be pushed or driven to totally support issues or efforts which we have not adopted as our own."

Denny explained, "We each require a belief that we are a member of a team which has been organized to accomplish a common objective. We may require a coordinator—a manager, if you like—to orchestrate our efforts. But we are equal members of the team, each performing a vital function."

"On any given day," Denny continued, "the most important individual cannot be predicted and placed on an organization chart. On June 15th, the most important individual may be a machine operator attempting to produce a difficult part which is delaying the shipment of a product critical to a major customer. It may be an accounting clerk who has discovered a serious billing error that will surely infuriate that same customer. It may be a beginning engineer who, through his own creativity, contributes an idea that will germinate an entire line of new products. If an organization—and you in your role as a manager—fails to recognize the uniqueness of each and every individual, then I believe your collective efforts are doomed to mediocrity," Denny said.

Denny also gave the new MBA's three points to remember as they begin their careers.

Point No. 1—Don't be unduly concerned where you start on the corporate ladder. Do be concerned that the ladder is oriented in a direction you wish to pursue.

Point No. 2—Only you can measure your success. Don't let the world's public relations department establish false yardsticks for you.

Point No. 3—Seek a growth environment. Do your job well, and your opportunities will materialize.

**"We each require a belief that we are a member of a team which has been organized to accomplish a common objective. We may require a coordinator—a manager, if you like—to orchestrate our efforts. But we are equal members of the team, each performing a vital function."**

Denny concluded with final words of advice to the new MBA's, "I hope you will realize that you are not entering a 100 yard dash with a prize only for the first to cross the finish line. Instead, you are about to join a group of people embarking on a 20-30 year cross-country run.

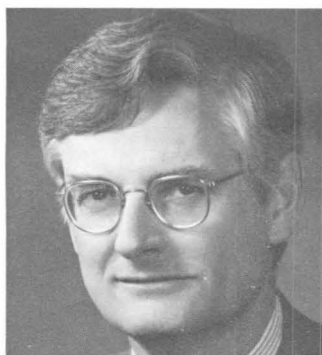
"Some will speed ahead and then tire. Others will develop strengths and skill as they progress through the journey. Some will find satisfaction only in anticipating their final standing. Others will discover that they find more enjoyment in the company of their fellow runners, the excitement of their environment as they proceed and the pleasure of setting and achieving their own rhythm and pace. Some will pause to pick a flower, or to read a book of poetry beside a stream. Others will slow their pace to assist the less fortunate over a hurdle or pick up those who have stumbled.

"There is no finish line to this race—only a start. There is no scoreboard. For each runner is his private judge."

## New Members Added to Board of Overseers



Barbara Armajani



Robert H. Edwards



Geri Joseph

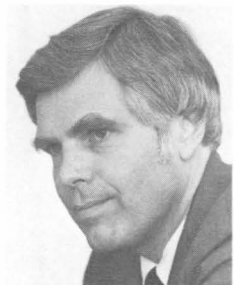


Kendrick B. Melrose

Four new members were named to the Board of Overseers of the School of Management at the quarterly meeting in July. They are: **Barbara Armajani**, president and CEO of Powers; **Robert H. Edwards**,

president of Carleton College; **Geri Joseph**, journalist and former ambassador to the Netherlands; and **Kendrick B. Melrose**, president of the Toro Company.

## MacLaury Addresses Alumni on Reaganomics



The Reagan economic program is a remarkably coherent and comprehensive strategy for changing the direction of economic policy in this country but, in the months ahead, maintaining credibility with the American people may be the crucial test.

**Bruce K. MacLaury** This is the opinion expressed by Bruce K. MacLaury, president of the Brookings Institution, in an address given to the School of Management Alumni Association this July.

In its proposals to stem and then turn back the rise in marginal tax rates, to accelerate capital recovery, to apply stricter cost-benefit analyses to regulatory decisions and to curb the rise in transfer payments, the current economic line is consistent with the President's pledge to emphasize the supply-side incentives to productivity. And its support for a policy of monetary restraint is consistent with a monetarist view of how inflation can be controlled, explained MacLaury in an address titled "Reaganomics: Great Expectations."

"A serious concern, however, is whether the administration hasn't jeopardized its credibility unnecessarily in a couple of important areas," said MacLaury.

"Credibility, after all, is the name of the game if one is setting out to change expectations. For example, the administration has emphasized that its cuts in social programs—food stamps, medicaid, job training, unemployment insurance, etc.—will not hurt the truly needy. While one can argue about definitions of true need, common sense says that this kind of promise cannot be fully kept, and therefore should not have been made, despite political pressures to do so," MacLaury stated.

"Or take an example at the other end of the scale—even though there was widespread acceptance of

reduction in high marginal income tax rates—the decision to balloon the exemption on estate taxes from \$175,000 to \$600,000 has little justification as a supply-side measure. It only highlights the claims of critics who decry the treatment of different income groups in the Reagan program," explained MacLaury.

Economic and budget forecasts is the other area where the administration's credibility is on the line.

MacLaury explains, "The administration will be extraordinarily fortunate if real growth rises to 4.5 percent per year on average from 1982-85, at the same time that inflation drops from 11 percent to 5 percent and short-term interest rates fall from 14 percent to 6 percent. Likewise, it will take an unprecedented rise in velocity for a declining rate of money growth to finance an average 10 percent rise in nominal GNP over this period. And finally, the search for additional sizeable budget cuts from a dwindling number of program areas will be even more difficult than the current expenditure cutting exercise. Yet these cuts are already assumed in the projection of budget balance by 1984."

"Maintaining the faith of the public is crucial to the success of Reaganomics. The promise of a painless cure for stagflation is based on the hope that 'rational expectations' can be made to work in reverse," said MacLaury.

To work, the public must "see the proposed changes in policy, believe in them and act to anticipate disinflation, just as it anticipated inflation in the past. In this kind of setting, those who disbelieve are as unpopular as the boy who proclaimed that the emperor had no clothes. Indeed, we must truly hope that the emperor *does* have clothes, because there is no other painless way out of stagflation."

"Since painless disinflation depends on rapid adjustment of prices, with little decline in output, the success of the Reagan economic program depends not only on the consistency and persuasiveness of the program itself, but also on the nature of the economy to which it is being applied. On both counts the jury is still out," concluded MacLaury.



## Alumni Advisory Council Established; Chairman Named

"Our Mission: To help make the school one of the best in the country" is the objective adopted by the alumni board of directors of the School of Management. Alumni leaders designed a new structure for alumni involvement in the School of Management following an intense long range planning process. Their ideas became a reality in the formation of the School of Management Alumni Advisory Council.

Steven W. McArthur, '67, assistant controller, Dayton Hudson Corporation, has been named chairman of the new advisory council.

"The Alumni Advisory Council represents a significant partnership between all of our alumni and the School," stated Dean David Lilly. "Our alumni relate directly to all facets of the School, and we look to them to be the primary external support group assisting the School in achieving its goals."

The Alumni Advisory Council will be involved in:

- advising the School on new and current programs;
- serving as resource people;
- providing forums for alumni-School interaction;
- developing the "networking" concept for alumni;
- recruiting alumni volunteers to assist the School.

The Council itself will represent all alumni of the School, including alumni of some of the Executive Development Center programs. Through the leadership of the Alumni Advisory Council, alumni will be involved in placement activities, academic affairs, student recruitment, fund raising and advancement of the School.

"Our alumni are recognizing that the School has advanced rapidly in quality and vision, and they are expressing great interest in becoming strategically involved in its development. The Alumni Advisory Council is an exciting vehicle for alumni involvement; it will allow our alumni to make a personal contribution to the direction of the School," said Gretchen Roufs, director of Alumni Relations for the School of Management.

For more information about the Alumni Advisory Council, please contact Gretchen Roufs at (612) 376-3217.

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## ALUMNI UPDATE

1942

**Kenneth L. Block**, chairman and treasurer of A. T. Kearney, Inc., an international management consulting firm, was the featured speaker at the Beta Gamma Sigma annual meeting. Mr. Block was elected to BGS as a junior in the business school. Following WWII, he obtained a BS from MIT and an MBA from the University of Michigan. He is a Registered Professional Engineer, holds the Certificate in Public Accounting and is a Certified Management Consultant.

1946

**Douglas Amdahl**, an associate justice of the Minnesota Supreme Court since July 1980, has been named chief justice by Governor Quie, effective with the resignation of the current chief justice, Robert Sheran in December.

1949

**Philip W. Sherry** has been named vice president and controller for international control systems for Honeywell. Previously, he was vice president and control systems controller. He joined Honeywell in 1950.

1951

**John Jerrard** is president and CEO of Albrecht of Minneapolis, the largest and oldest manufacturing and retail furrier in the U.S. He joined the family firm in 1950 while attending graduate school at the U of M for an MBA. His father, Ralston Jerrard, whose wife was an Albrecht, ran the Minneapolis store from the end of World War I until his death in 1959.

1955

**Gregg E. Ericksen** has been named vice president and control systems controller for Honeywell. He joined Honeywell in 1960.

1958

**Donald F. Wright**, MBA, has been named president and chief operating officer of the Los Angeles Times. Since 1978, he has been president and chief operating officer of Newsday, the Times-Mirror newspaper based in Long Island, N.Y.

1966

**John M. Braasch**, Ph.D., was elected president and CEO of Energy Systems, manufacturers of comprehensive boiler management systems, in January 1981. Besides his Ph.D. in Business, he holds two engineering degrees from the U of M and has taught business and engineering courses at the University. Braasch served as assistant to CEO Frank Donaldson of the Donaldson Company in 1973, became controller the following year and in 1978 was promoted to the vice president of the company's Eurafrican and South American operations.

1972

**Chuck Janzen** has been named energy manager for Ardan, Inc., a catalog showroom chain operating in 13 states. Carlson Companies, Inc. is owner of the Ardan chain.

1975

**David A. Larson**, regional procurement manager in the Agricultural Products Division, has been promoted to purchasing manager for Restaurant Operations for International Multifoods Fast Food and Restaurant Division. He joined Multifoods in 1978 as an ingredient buyer and in 1979 was named regional procurement manager.

## Faculty Publications

**“Toward A Predictive Model of Organizational Buying Behavior”** by Richard N. Cardozo, **Working Paper No. 57**, April 1981.

This paper extends previous work in modeling organizational buying behavior to develop an empirical model to predict probabilities of purchase under specified conditions. Purchase probabilities may be estimated both from published empirical studies and from executive judgment. Managers may use the model to forecast results of industrial marketing plans, to segment organizational markets and to diagnose marketing problems. Researchers may use the model to identify opportunities for research and to integrate new with existing research to predict purchase probabilities.

**“Managing Under Civil Turmoil: Some Case Evidence from Lebanon”** by Delbert C. Hastings, **Working Paper No. 58**, June 1981.

Adequate political risk analysis notwithstanding, in the long-run nearly every foreign investment finds some risks becoming realities. Civil chaos and inaction or breakdown of government are risk sources of current importance. This article considers the case of civil chaos where the at-risk objects are chiefly persons and property.

What can the manager do shortly before and during civil turmoil to protect persons and property under his charge? And earlier, at the investment planning stage, what protections can be built into the investment so as to minimize loss, especially of physical rather than purely financial assets? The situation in Lebanon during the past decade offers instruction.

**“The Treatment of Rents in Cost-Benefit Analysis”** by Edward M. Foster, **Reprint No. 209**, reprinted from *American Economic Review*, Vol. 71, No. 1, March 1981.

In cost-benefit analysis of government projects, labor and other factors of production are typically valued not by what they cost but by the value of what they could produce if left in the private sector—a *shadow wage* that differs from the market wage.

To the extent that their employment can generate profits or tax revenues, their shadow wage exceeds their market wage. This paper shows that the approach is formally correct given its frame of reference, but questions the relevance of the result. In the presence of *rent-seeking* activity (i.e. using resources to obtain or maintain control of profits or tax revenues) each dollar's worth of value uses up a dollar's worth of resources, part in rent-seeking. Then cost-benefit analysis should use market wages rather than shadow wages to value factors of production.

**“Competitively Awarded Government Grants”** by Edward Foster, **Reprint No. 210**, reprinted from the *Journal of Public Economics*, 15, (1981).

The model of consumer behavior subject to a

budget constraint, often applied to such programs as Federal grants to local governments, ignores the fact that the terms and size of the grant may be influenced by the potential recipient's own efforts. This is most clearly true for competitively awarded grants. In a simple case the marginal recipient of a competitively awarded grant receives no net private benefit and imposes a net loss on society for his effort. The issue is general and should be considered in adopting a grant program to achieve social goals.

**“The Federal Motor Carrier Act of 1980: Review and Analysis”** by Donald V. Harper, **Reprint No. 211**, reprinted from the *Transportation Journal*, Winter 1980.

The passage of the Motor Carrier Act of 1980 was the culmination of a long and controversial effort to reform economic regulation of the interstate for-hire motor trucking industry. It was the first substantial change in the federal regulatory system for motor trucking since the Motor Carrier Act of 1935, which instituted federal economic regulation. The purpose of this article is to summarize the new act, compare it to the legislation that preceded it, and to evaluate it in terms of its probable effectiveness in achieving the goals that Congress had in mind when passing the legislation.

The author concludes that “the law is, in general, a competent piece of legislation indicating that the drafters of the bills knew what they were doing (which has not always been the case with transportation legislation). Congress has provided what appears to be a generally workable law that can provide substantial reform and yet not destroy the regulatory system altogether, given reasonable interpretation by the ICC.”

**“A Framework for Research in Computer-Based Management Information Systems”** by Blake Ives, Scott Hamilton and Gordon B. Davis, **Reprint No. 212**, reprinted from *Management Science*, Vol. 26, No. 9, Sept. 1980.

The paper presents a comprehensive framework for research in Management Information Systems (MIS). The necessity for a more comprehensive research framework is derived from a review of past research frameworks. The new framework is validated by mapping 331 MIS doctoral dissertations into its research categories. The dissertations are also classified by research methodology employed.

The comprehensive MIS research model is useful not only in understanding and classifying MIS research but also in generating potential hypotheses for future research. Hypothesis generation using the model is explained and illustrated.

Single copies of the reprints may be obtained free upon request by writing to the Research Division or by calling (612) 373-4482.



# Case Development Center Update

The new Case Development Center at the School of Management has been in operation since spring 1981. Organized to meet the needs of faculty in developing appropriate cases for classroom instruction, the Center is coordinated by Professor Richard Cardozo.

“We believe this program will contribute significantly to the quality of our instruction to all market segments,” said Cardozo. “In addition, we will have further opportunity to strengthen our ties with the business community through a common activity that supports the School.”

The Center provided a training seminar for faculty and prospective graduate student casewriters. Thus far, three cases have been completed and twelve more are in progress.

The search for appropriate case material begins when a faculty member expresses need for a particular case to illustrate a significant business problem in which a complex decision-making process could lead to one or more courses of action.

A case is ready for classroom use only when the information has been officially released by the company providing the data. Some cases, in their final form, are disguised in order to avoid revealing proprietary information.

“Effective case teaching requires the teacher to transfer his/her method of analysis to the students so that they develop their own skills in identifying and solving management problems,” explained Cardozo. “This transfer requires the instructor to do much more than just lead the class through a discussion of a problem; he must make explicit the analytical models he is using, identify the uses and limits of those models, describe how the models may be varied to meet different problems, and then provide students with opportunities to develop and practice those models themselves.”

The Case Development Center is expected to act as a resource in the training of faculty, development of cases and to coordinate the use of cases among the faculty.

## Walker Receives Journal Award

**Orville Walker** is winner of an award for the outstanding article published in the *Journal of Marketing Research*. The award was made at the Washington Marketing Educators' Conference in August. The article “Organizational Climate and Job Satisfaction in the Sales Force” by Walker and Gilbert Churchill and Neil Ford of the University of Wisconsin, was published in the November 1976 issue of the American Marketing Association's journal. Presented annually to the author or authors of the best article or research note published in *JMR* in a given year, the award is made after a five-year time lag to prevent the selection of a faddish article and allow for a better assessment of long-term significance.



Orville Walker & Kenneth Roering, new Marketing Department chairman

## ALUMNI UPDATE

SEND TO: Gretchen Roufs, School of Management  
University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455      Date \_\_\_\_\_

Name \_\_\_\_\_  
(Last) (First) (Middle Initial or Former Name)

Home Address \_\_\_\_\_  
(Street)

(City) (State) (Zip)

Year of Graduation \_\_\_\_\_

Current Employer and Business Address \_\_\_\_\_

Current Position \_\_\_\_\_

INFORMATION YOU WOULD LIKE TO SHARE WITH YOUR CLASSMATES (MARITAL STATUS, CHILDREN, HOBBIES, HONORS, AWARDS, ETC.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ I would like to become more actively involved with the School. Please contact me.

# Household Energy Savings

by William Rudelius, Richard Weijo, and Gary Dodge

William Rudelius is a professor and Richard Weijo is a doctoral student in the School of Management, University of Minnesota. Gary Dodge is director of the Saint Paul Energy Office. Rudelius and Weijo recently completed a report titled *Energy Conservation for Homeowners: An Action Program for the City of Saint Paul* that was based on the Saint Paul Energy Mobilization Survey, part of which Dodge planned and coordinated. Funds for the Rudelius-Weijo study were provided by the Saint Paul Energy Office, the School of Management, and CURA. A few copies of the study are available from the School of Management, 225 Business Administration, 271 19th Avenue South, University of Minnesota, Minneapolis 55455 (612/373-4482).

“Save energy: help reduce America’s dependence on foreign oil!”

This is the type of appeal all of us see or hear every day in newspapers and on television to help inspire us to save energy—at home, in our cars, at work. There is only one problem with such appeals to patriotism and social responsibility: they don’t work.

So what does work?

Individuals and households will take permanent, continuing actions to save energy for one main reason: it’s in their own best short-run and long-run interest to do so. But for households to take energy-saving actions around the home, they need more precise information on the costs and savings of such actions. It is possible for our communities to devise creative programs that promote energy conservation (efficient energy use) among households.

## The Saint Paul Energy Mobilization Survey

On February 13-15, 1980, Saint Paul mobilized for energy. Thousands of city workers and volunteers conducted the Saint Paul Energy Mobilization Survey to collect information from some 34,000 city households and businesses on their energy-conserving activities.

The study described here dealt only with homeowners responding to the Saint Paul survey. These respondents were presented with eighteen common energy-conserving actions. We list them here arranged according to the frequency with which the action needs to be taken by a homeowner.

### Continuous actions

- Regularly turn off unused lights
- Close drapes and shades at night
- Close off rooms
- Turn down furnace thermostat

### Seasonal actions

- Caulk cracks
- Weatherstrip doors and windows
- Replace broken window/storm doors
- Clean and tuneup the furnace

### One-time actions

- Install clock set-back thermostat
- Install more efficient furnace
- Turn down water heater thermostat
- Install water flow regulators
- Insulate hot water pipes
- Insulate hot water heater
- Insulate the attic (6” or more)
- Insulate in the crawl space
- Insulate in the walls
- Install fireplace doors/caps

Table 1. NET FIVE-YEAR DOLLAR SAVINGS OF VARIOUS ENERGY-CONSERVATION ACTIONS, BY TYPE OF HOME

		2 Floor, 3 Bedroom Home					3 Floor, 4 Bedroom Home				
		Net 5-Year Savings <sup>a</sup>					Net 5-Year Savings <sup>a</sup>				
General Category	Specific Action	First-Year Savings (\$)	Cost of Materials (\$)	Cost of Labor (\$)	Materials Only (\$)	Labor and Materials (\$)	First-Year Savings (\$)	Cost of Materials (\$)	Cost of Labor (\$)	Materials Only (\$)	Labor and Materials (\$)
Continuous	Regularly turn off unused lights	\$ 8	\$ 0	\$ 0	\$ 56	\$ 56	\$ 11	\$ 0	\$ 0	\$ 82	\$ 82
	Close drapes and shades at night	\$ 7	\$ 0	\$ 0	\$ 52	\$ 52	\$ 10	\$ 0	\$ 0	\$ 74	\$ 74
	Close off rooms	\$17	\$ 0	\$ 0	\$126	\$ 126	\$ 24	\$ 0	\$ 0	\$ 179	\$179
	Turn down furnace thermostat	\$44	\$ 0	\$ 0	\$327	\$ 327	\$ 86	\$ 0	\$ 0	\$ 640	\$640
Seasonal	Caulk cracks <sup>b</sup>	\$39	\$ 19	\$ 54	\$271	\$ 217	\$ 53	\$ 22	\$ 72	\$ 372	\$300
	Weatherstrip doors and windows <sup>b</sup>	\$39	\$ 40	\$ 40	\$250	\$ 210	\$ 53	\$ 50	\$ 50	\$ 344	\$294
	Replace broken windows/storm doors <sup>b</sup>	\$ 5	\$ 3	\$ 5	\$ 34	\$ 29	\$ 5	\$ 3	\$ 5	\$ 34	\$ 29
	Clean and tuneup the furnace <sup>c</sup>	\$12	\$ 0	\$ 50	\$ 60	(\$ 190)	\$ 27	\$ 0	\$ 50	\$ 135	(\$115)
One-Time	Install clock set back thermostat	\$30	\$ 40	\$ 40	\$183	\$ 143	\$ 58	\$ 40	\$ 40	\$ 392	\$352
	Install more efficient furnace	\$81	\$700	\$ 700	(\$ 97)	(\$ 797)	\$150	\$800	\$ 700	\$ 316	(\$384)
	Turn down water heater thermostat	\$ 8	\$ 0	\$ 0	\$ 56	\$ 56	\$ 8	\$ 0	\$ 0	\$ 56	\$ 56
	Install water flow restrictors	\$11	\$ 10	\$ 10	\$ 72	\$ 62	\$ 11	\$ 10	\$ 10	\$ 72	\$ 62
	Insulate hot water pipes	\$ 2	\$ 2	\$ 0	\$ 13	\$ 13	\$ 2	\$ 2	\$ 0	\$ 13	\$ 13
	Insulate hot water heater	\$ 3	\$ 10	\$ 10	\$ 12	\$ 2	\$ 4	\$ 10	\$ 10	\$ 20	\$ 10
	Insulate the attic (6” or more)	\$16	\$150	\$ 300	(\$ 31)	(\$ 331)	\$153	\$150	\$ 350	\$ 988	\$638
	Insulate in the crawl space	\$18	\$ 60	\$ 60	\$ 74	\$ 14	\$ 18	\$ 60	\$ 60	\$ 74	\$ 14
	Insulate in the walls	\$89	\$260	\$1460	(\$402)	(\$1058)	\$353	\$390	\$2190	\$2236	\$ 46
	Install fireplace doors/caps	\$ 8	\$100	\$ 100	(\$ 44)	(\$ 144)	\$ 8	\$100	\$ 100	(\$ 44)	(\$144)

<sup>a</sup>Assumes a 20 percent per year increase in energy costs. Then the “Materials Only” column under “Net 5-Year Savings” is the First-Year Savings compounded for four additional years at 20 percent per year minus the “Cost of Materials.” The “Labor and Materials” column is similar but the “Cost of Labor” is subtracted as well as “Cost of Materials.”

<sup>b</sup>Assumes action is done once and it lasts for five years.

<sup>c</sup>To achieve an energy saving from cleaning and tuning up a furnace, some experts say this activity must be done annually. So “net 5-year savings” shown are 5 times the net first-year savings. These are not compounded because the costs are assumed to compound as well.

For each action the respondent was asked to indicate if he or she had performed that energy action and if not, why not. The survey also collected information on the respondent's age, income and size of home.

Our study examined the characteristics of homeowners who had engaged in conservation activities already or were planning to do so in the near future. In addition, it identified households that are large energy consumers and can be direct targets for a conservation campaign. If Saint Paul can succeed in persuading these households to save energy, it will make a larger impact than having households that are already conserving and using minimal levels of energy make additional minor changes.

People use a sequence of steps to arrive at an economic decision: awareness, choice, implementation, use, and evaluation. Applied to energy decisions, households at different stages of this decision process need different kinds of assistance to get them to take energy-saving actions.

Useful Information for Households

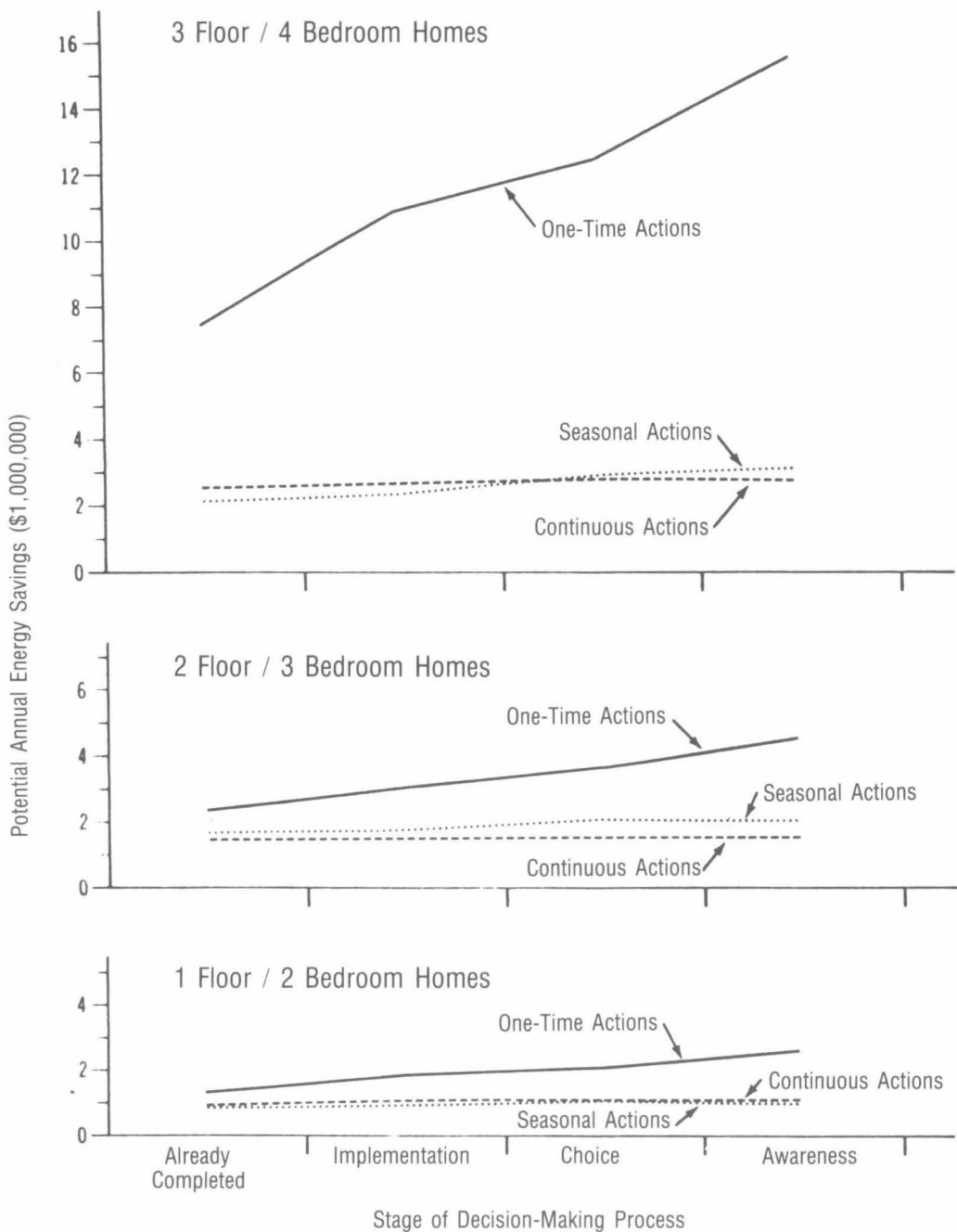
The main incentive for energy actions by households is economic, to save money. Yet few homeowners understand which specific energy-saving actions will accomplish this. For example, who really knows how

much his or her fuel bill will be reduced in a year by installing six inches of R-19 insulation in the attic? So using information provided by the Minnesota Energy Agency and Northern States Power Company, we estimated what the net five-year savings might be for typical Saint Paul houses.

Table 1 provides this information for a two-floor, three-bedroom home and for a three-floor, four-bedroom home—larger homes where the potential for energy savings is great. Note that the net five-year savings are shown for both the situation when homeowners do the work themselves (the "Materials Only" savings column) and when they contract to have it done (the "Labor and Materials" savings column). The differences in savings of various actions are dramatic. For example, attic insulation in the four-bedroom home will be a much better investment than in the three-bedroom home. And a clock set-back thermostat will be a good investment in both homes—unless a household is very conscientious in turning its thermostat down on its own.

But the key value of Table 1 is that it permits each household to make its own knowledgeable energy-saving decisions—to elect to take those actions best for it.

Figure 1. TOTAL POTENTIAL ANNUAL ENERGY SAVINGS FOR SAINT PAUL, BY TYPE OF HOUSE IN WHICH HOUSEHOLD IS LIVING.





## Actions Saint Paul Can Emphasize

The information in Table 1 can be weighted by the number of houses of various sizes and the energy actions people living in them have not yet taken. In this way one can identify what energy actions Saint Paul should stress in the future. Figure 1 summarizes the potential energy savings possible from households living in three different sized houses. The figure is arranged according to the stages of the decision process that households are presently in. Thus, if all those who were in the "awareness" stage completed the energy-saving actions, the largest savings would be realized.

Our analysis of the Saint Paul survey results showed that energy savings vary significantly according to the age and income of the homeowner. And among the kinds of actions that can save energy (continuous, seasonal, and one-time), one-time actions offer the greatest potential for energy savings. A reasonable plan for Saint Paul could, therefore, emphasize the following.

- Seek energy savings from all households in the city, but focus special effort on groups for which the energy savings potential is the greatest: those whose heads of household are under 60 years of age; those whose annual income exceeds \$20,000; and those who live in larger homes (three-floor and four-bedrooms).
- Direct programs and messages at households who need help in making decisions to take energy-saving actions. These can include: providing loan, grant, or tax assistance programs for those unable to take action (for physical or financial reasons); providing lists of approved contractors, lenders, and suppliers; and providing information on the dollar benefits and costs of energy-saving actions.
- Use "reminder" advertising to promote energy conservation from continuous activities (such as setting back thermostats and turning off lights) to seasonal activities (such as weatherstripping and furnace tuneups) in the fall and spring.

## Actions Saint Paul Could Use to Communicate Energy-Saving Ideas

Since Saint Paul has a very limited budget, it must devise an effective system of energy-saving ideas. Our suggestions to Saint Paul include these.

- Arrange to adapt, print, and distribute the information on five-year net dollar savings of various energy-conservation actions for each of the three types of typical homes studied here, two of which are shown in Table 1.
- Encourage owners of large homes to insulate their attics and all homeowners to do the following:
  - one-time actions—install clock setback thermostat;
  - seasonal actions—caulk cracks, weatherstrip doors and windows;
  - continuous actions—close off rooms, turn down furnace thermostat.
- Use public service announcements on TV and radio; informative advertisements for local newspapers; inside-the-bus posters; neighborhood newspapers; direct-mail insets in tax statements and utility bills; and pamphlets distributed by hardware stores, home-improvement centers, and neighborhood groups.
- Use Saint Paul's neighborhood councils and especially the projected energy conservation offices that a pilot group of neighborhood councils will operate to communicate energy-saving ideas to local neighborhood residents, as well as local churches, PTA's, hardware stores, and home-improvement centers.

This study focuses specifically on the energy-conservation needs of the City of Saint Paul and its homeowners. But the research approach used can be applied to all communities—large or small, frost belt or sun belt.

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